

MODIS IOT Weekly Report
Mission Operations Days: 2001/188 to 2001/194
July 6, 2001 20:00:00 GMT to July 13, 2001 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in A-side Science Mode

Blackbody	A On; B Off	Nominal
Calibration Electronics	A On; B Off	Nominal
Control Processor	A On; B Off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A On; B Off	Nominal
FDDI Port	A On; B Off	Nominal
FIFO Memory	1 & 2 On; 3 & 4 Off	Nominal
Format Processor	A On; B Off	Nominal
Power Supply: 1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On; B Off	Nominal
NIR	A On; B Off	Nominal
SMIR	A On; B Off	Nominal
LWIR	A On; B Off	Nominal
PC FPA: LWIR	A On; B Off	Nominal
Radiative Cooler:		
Outgas Heaters	All Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A On; B Off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On; B Off	Nominal
Flight Software	Rev BD + 2 patches	Nominal
Inhibit Ids Set	None	Nominal
TMON 68	Enabled	Nominal
TMON 69	Disabled	Nominal

This Week's Completed MODIS Activities:

Friday, July 6, 2001

187/20:55:17 ATC OA-16: SD/SDSM Screened Calibration
187/22:34:10 ATC OA-15: SD/SDSM Open Calibration

Saturday, July 7, 2001

None

Sunday, July 8, 2001

None

Monday, July 9, 2001

None

Tuesday, July 10, 2001

191/16:37 Real-time FOT Set IRU to high rate for roll maneuver; less pointing accuracy
191/18:09:37 ATC Move Formatter to Night ahead by 3:23 to ensure 50/50 day/night
191/18:18:53 ATC FOT begins spacecraft roll slew to -11.7504 degrees
191/18:24:40 ATC Set Formatter to Day Rate
191/18:24:42 ATC Set SCIABNORM Flag to ABNORM
191/18:24:44 ATC Set PC band DC Restore to OFF
191/18:24:46 ATC Set PV band DC Restore to OFF
191/18:24:48 ATC Set Sector Rotation to -3072 (Earth Aperture to view Space view and OBCs)
191/18:31:18 ATC Set Sector Rotation to Zero (Normal)
191/18:31:20 ATC Set PV band DC Restore to ON
191/18:31:22 ATC Set PC band DC Restore to ON
191/18:31:24 ATC Set SCIABNORM Flag to NORM
191/18:31:26 ATC Set Formatter to Night Rate
191/18:36:33 ATC Spacecraft has returned to nominal attitude
191/18:43 Real-time FOT set IRU to low rate after roll maneuver; nominal pointing
191/19:03:51 ATC Move Formatter to Day later by 1.23 to ensure 50/50 day/night
Note: should have been 19:05:51, collecting 2 extra minutes of day rate data

Wednesday, July 11, 2001

192/10:33:05 – 11:30:36 ATC OA-23: SRCA Full Spatial
192/21:14:00 ATC OA-15: SD/SDSM Open
192/22:05:18 – 22:38:51 ATC OA-19: SRCA Full Radiometric
192/22:52:53 ATC OA-16: SD/SDSM Screened

Thursday, July 12, 2001

193/12:53:15 – 13:44:54 ATC OA-22: SRCA Full Spectral Part 1A
193/14:47:34 – 15:22:19 ATC OA-22: SRCA Full Spectral Part 2A
193/16:11:10 – 17:02:26 ATC OA-22: SRCA Full Spectral Part 3A
193/18:05:21 – 18:43:19 ATC OA-22: SRCA Full Spectral Part 4A

193/21:00:00 ATC Set Blackbody temperature to 270K

Friday, July 13, 2001

194/15:00:00 ATC Set Blackbody temperature to 280K

194/19:00:00 ATC Set Blackbody temperature to 285K

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

In the month of July, MODIS will be performing SRCA spatial, radiometric, and spectral calibrations, a black body calibration, and weekly SD/SDSM calibrations.

Friday, July 13, 2001

194/22:00:00 ATC Set Blackbody temperature to 290K

Saturday, July 14, 2001

195/02:00:00 ATC Set Blackbody temperature to 295K

195/02:00:30 ATC Set Blackbody duty cycle to FULL

195/04:00:00 ATC Set Blackbody temperature to 300K

195/06:00:00 ATC Set Blackbody temperature to 315K

195/09:00:00 ATC Set Blackbody temperature to 270K

195/09:00:30 ATC Set Blackbody duty cycle to THIRD

Sunday, July 15, 2001

196/05:00:00 ATC Set Blackbody temperature to 290K

Monday, July 16, 2001

None

Tuesday, July 17, 2001

None

Wednesday, July 18, 2001

192/21:20:28 ATC OA-16: SD/SDSM Screened

192/22:59:21 ATC OA-15: SD/SDSM Open

Thursday, July 12, 2001

None

Friday, July 13, 2001
None

Maneuvers:

The next MODIS Lunar Roll Calibration is scheduled for DOY 221 from 05:24:35 to 05:31:05. A second lunar calibration will be performed without a roll maneuver on the same day from 20:23:37 to 20:30:07.

MODIS Anomalies:

Investigation into the PS2 shutdown anomaly is still underway. An anomaly report is expected by the end of this month.

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open, operating with the Formatter Resolution Flight Software Patches (FRFSP).

MODIS Telemetry Trends:

Trending has resumed with the instrument on the A-side. All appears nominal at this time.

Non-MODIS Significant Events:

None.

Limited Life Item Status:

SRCA 10W Lamp #1: 189.0 of 500 hours
SRCA 10W Lamp #2: 144.7 of 500 hours
SRCA 10W Lamp #3: 153.9 of 500 hours
SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 557.9 of 4000 hours
SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1645 of 3022 Movements
Nadir Aperture Door: 532 of 1316 Movements
Space View Door: 437 of 1316 Movements